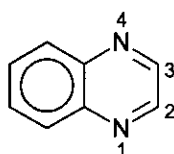




Introduction

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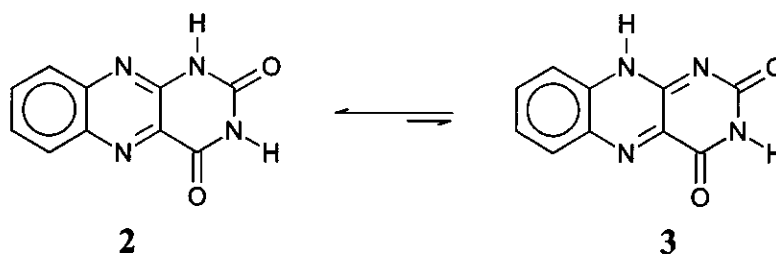
Quinoxaline is named also 1,4-benzodiazine, benzo[a]pyrazine, benzoparadiazine and phenpiazine. The numbering of quinoxaline is illustrated in structure 1.



1

Quinoxaline nucleus present in some natural compounds (echinomycin and triostine A). It is called quinoxaline antibiotic, powerful selective inhibition of nucleic acid synthesis *in vitro* (**Kuroya and Ishida, 1961**).

The biological action of flavin coenzymes results from a vital heterocyclic constituent called alloxazine 2. Alloxazine 2 is a tricyclic heterocycle and can be considered as being composed of two condensed fragments quinoxaline and uracil. Several tautomeric forms are possible, and the two most important are called alloxazine 2 and isoalloxazine 3 (**Pozharskii et al., 1997**).



2

3